

REMARKS

Claims 2, 4-6, 8 and 10-14 are pending in the present application. Reconsideration in view of the following arguments is respectfully requested.

Claim Rejections – 35 U.S.C. §103

Claims 2, 5, 8, 11, 13 and 14

Claims 2, 5, 8, 11, 13 and 14 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Hogan (USP No. 6,442,393) in view of Zadeh et al., (USP No. 6,516,195), hereafter “Zadeh” and Sawyer et al. (USP No. 5,307,400), hereafter “Sawyer”. This rejection is respectfully traversed.

Applicants submit that each of Hogan, Zadeh and Sawyer, either singly or in combination, fail to teach or suggest a method for identifying a lost call location in a wireless network system and a wireless network system comprising, at least:

continuously updating information associated with the location of the mobile terminal;
and

discarding the updated information associated with the location of the mobile terminal in response to the normal termination of the call,

in combination with the other functions recited in claim 13.

Applicants submit that each of Hogan, Zadeh and Sawyer, either singly or in combination, fail to teach or suggest a wireless network system, comprising, at least:

a controller . . . configured to:
continuously update the information associated with the location of the mobile terminal; and

discard the updated information associated with the location of the mobile terminal in response the normal termination of the call,

in combination with the other features recited in claim 14. As the features are substantially common in each of the independent claims, these are argued together.

Hogan does not continuously update location information of the mobile terminal

The Examiner alleges that “providing at least one parameter indicative of a signal quality associated with a location of a mobile station” reads on continuously updating information associated with the location of the mobile terminal. Applicants disagree.

At best, any position update information generated in Hogan is sporadic or merely based on a positioning request from the network. Hence the Examiner has not pointed out, in Hogan, the entity or function which is continuously updating information of the location of the call (mobile terminal), so that the most recent information is available, as is done by the Position Detection center (PDC) 140 in the present application.

In Hogan, various algorithms can be used to determine signal quality conditions (described as an interference or poor coverage condition [Hogan, col. 6, lines 11-13], frame error rate (FER) of the uplink signal [Hogan, col. 7, lines 21-27]. In each case, these measured conditions are compared against some threshold, and if the condition exceeds the threshold, only then is the location function 6 invoked to determine the mobile station's geographic location [see for example, Hogan, col. 6, lines 25-28, col. 7, lines 3-8 and lines 26-27].

Accordingly, in none of these procedures does Hogan's BSC supervisory functionality 4 actually continuously update information associated with the location of a mobile terminal. Rather, BSC supervisory functionality 4 issues power control commands and takes constant measurements of uplink power to determine the signal condition in the uplink that is to be compared to a threshold, and possibly to invoke the locating or positioning function 6 that determines the mobile station's geographic location. [See Hogan, col. 5, lines 50-58].

Zadeh has been cited for the limited teachings related to receiving a connect message to set up a call, and thus does not cure the deficiency in Hogan, in that Zadeh does not teach or suggest continuously updating information associated with the location of the mobile terminal. Sawyer has been cited for the limited teachings related to discarding location information after call termination, and thus does not cure the deficiency in Hogan, in that Zadeh does not teach or suggest continuously updating information associated with the location of the mobile terminal. The rejection as pertaining to claims 13 and 14 is therefore improper, as the Examiner has failed to provide references which, taken together, teach each an every element or feature of the claim, as required by 35 U.S.C. 103(a). Withdrawal of the rejection for at least the above reasons is therefore earnestly solicited.

As claims 2, 5, 8, 11 depend on claims 13 and 14, these claims are allowable at least for the reasons stated above with respect to claims 13 and 14. Applicants respectfully request that the Examiner withdraw this art grounds of rejections.

Additionally, and notwithstanding the above, several ones of the dependent claims make the distinctions over Hogan even more apparent.

Claim 2: Zadeh does not teach sending a trigger message responsive to receiving the connect message [which] . . . causes the continuous monitoring of the radio signals. The Examiner relies on col. 2, lines 55-56 of Zadeh, reprinted below:

The above and other objects are achieved as is now described. A method and system are disclosed for optimizing mobile telecommunications networks utilizing geographical positioning information. Initially, a particular telecommunications event, such as an occurrence of the particular telecommunications event automatically triggers geographical positioning of a mobile unit within a mobile telecommunications network. Other particular telecommunications events designated as such include high bit error rate events, wherein the bit error rate is greater than a predefined threshold. A geographical positioning request is then transmitted to a mobile location center within the telecommunications network, in response to an occurrence of the particular telecommunications event. (underlining for emphasis)

On its face, the passage indicates that the trigger is an event, which causes geographical positioning of a mobile unit within a mobile telecommunications network, not the continuous monitoring of radio signals. The geographic positioning described in Zadeh is not continuous monitoring it is a recording operation performed for a finite time and analyzed by an optimization team, see Zadeh, col. 8, lines 18-32 and lines 63-67, before being terminated at block 118 (Zadeh, FIG. 3). Claim 2 is therefore allowable for at least this additional reason.

Claim 8: Hogan does not teach of a Position Detection Center (PDC) continuously monitoring for the radio signal in response to the trigger message. FIG. 2 of Hogan does not illustrate a Position Detection Center for continuous monitoring, it simply illustrates the communication paths between various network entities. The supervisory function of BSC 3 in any case would be doing the monitoring, but as already described above, the parameter being continuously monitored in Hogan is uplink transmit power and it is not being done based on any trigger. The trigger of Zadeh is for geographic positioning and not for continuously monitoring of a radio signal in response thereto. Claim 2 is therefore allowable for at least this additional reason.

Examiner has failed to make at a proper prima facie case of obviousness in attempting to reject the discarding steps or features in Claims 13, 14

Applicants have read the entirety of Hogan, Zadeh and Sawyer, and do not see how, in reading these references, one of ordinary skill in the art would think to combine Sawyer with Hogan and Zadeh. Hogan discloses determining the location of mobile stations by reporting when a signal quality becomes unacceptable, i.e., drops below some threshold, so as to invoke

a positioning function 6. Zadeh discloses determining the location of a mobile unit when a particular telecommunications event such as a dropped call has occurred. Both Hogan and Zadeh are therefore directed to determining mobile location based on some unacceptable parameter (e.g., poor signal quality, dropped call, etc.)

Sawyer, on the other hand, is directed to a method for monitoring the location of a mobile radio telephone as the mobile travels among visited cellular networks. The location is determined by the home cellular network when the mobile registers (or initiates a call) with the visited cellular network. The location information deleted in Sawyer is not based on a dropped call or a measured parameter of an associated radio signal which falls below of threshold.

Applicants therefore submit that Sawyer et al. is not reasonably pertinent to Hogan or Zadeh et al., since dropping the temporary location of the mobile is based on a dropped call or signal quality falling below a threshold, as described in Zadeh et al. and Hogan respectively. Applicants submit that Sawyer would not be a candidate for combining with Hogan or Zadeh to teach discarding the updated information associated with the location of the mobile terminal in response to the normal termination of the call, as recited in claims 13 and 14.

A reference is reasonably pertinent if ... it is one which, because of the matter with which it deals, logically would have commended itself to the inventor's attention in considering his problem.... If a referenced disclosure has the same purpose as the claimed invention, the reference relates to the same problem ... if it is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it. In re Clay, 23 USPQ.2d 1058, 1060-61 (Fed. Cir. 1992).

The inventors of the present invention (or even Hogan or Zadeh et al.) would not look to Sawyer to solve any problems identified therein, since Sawyer relates to a different problem and/or provides no indication of the same purpose as the claimed invention. Applicants respectfully submit that claims 13 and 14 are allowable for this additional reason.

Additionally, and as previously presented, In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed.Cir. 1999) and In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed.Cir. 2000) set forth very rigorous requirements for establishing a prima facie case of obviousness under 35 U.S.C. §103(a). To establish obviousness based on a combination of elements disclosed in the prior art, there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant. The motivation suggestion or teaching may come explicitly from one of the following:

- the statements in the prior art (patents themselves)
- the knowledge of one of ordinary skill art, or in some cases,

the nature of the problem to be solved.

See Dembiczak, 50 USPQ at 1614 (Fed.Cir. 1999). In Kotzab, the CAFC held that even though various elements of the claimed invention were present (in two separate embodiments of the same prior art reference), there was no motivation to combine the elements from the separate embodiments, based on the teachings in the prior art.

In order to establish a prima facie case of obviousness under 35 U.S.C. §103(a), the Examiner must provide particular findings as to why the two pieces of prior art are combinable. See Dembiczak, 50 USPQ2d at 1617. Broad conclusory statements standing alone are not "evidence".

In order to provide motivation for combining Sawyer and Hogan-Zadeh et al. to reject claims 13 and 14, on page 4 of the Office Action of August 25, 2005, the Examiner asserts:

It would have been obvious to combine Sawyer et al. with Hogan and Zadeh et al. . . "in order to save memory space".

Applicants have read Sawyer, Hogan, and Zadeh and do not see how reading these references one of ordinary skill in the art would think to combine Sawyer with Hogan and/or Zadeh. Sawyer discloses a method for monitoring the location of a mobile radio telephone when the mobile travels among visited cellular networks, where the location is determined by the home cellular network when the mobile registers (or initiates a call) with the visited cellular network. This is completely antithetical to locating a mobile by means of a drop call or signal quality.

The Examiner has not identified any teaching or suggestion, anywhere in Sawyer, that would lead one skilled in the art to look to Sawyer in order to figure out a way to identify a lost call location in a wireless network system as recited in claim 14, for example, and as somewhat similarly recited in method claim 13. Accordingly, Applicants respectfully submit that claims 13 and 14 are allowable for at least the additional reason that the Examiner has failed to establish a proper prima facie case of obviousness under 35 U.S.C. 103(a), in view of Dembiczak and Kotzab.

Claims 4 and 10

Claims 4 and 10 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Hogan, Zadeh and Sawyer in view of O'Donnell. This rejection is respectfully traversed.

Applicants submit that claims 4 and 10 are allowable at least for the reason that these claim depend off allowable claims 13 and 14. O'Donnell has been cited for the limited teachings related to a signal strength threshold, and thus does not cure the deficiencies in Hogan, Zadeh and Sawyer, in that O'Donnell does not teach or suggest continuously updating information associated with the location of the mobile terminal.

In addition, claims 4 and 10 are allowable at least for the reason that O'Donnell does not teach of a threshold having a zero-signal strength level. The Examiner indicates that since O'Donnell uses a signal strength threshold to trigger a positioning information request, and "While a specific number [signal strength level] is not discussed, zero would be an obvious choice". This statement does not satisfy the requirements for making out a prima facie case of obviousness. Absent evidentiary support shown by the examiner for a zero signal strength threshold, the rejection is improper at least for the reasons that none of the cited references teach or suggest the disclosed zero signal strength threshold.

Claims 6 and 12

Claims 6 and 12 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Hogan, Zadeh and Sawyer in view of Rowles et al., hereafter "Rowles." This rejection is respectfully traversed.

Applicants submit that claims 6 and 12 are allowable at least for the reason that these claims depend off allowable claims 13 and 14. Rowles has been cited for the limited teachings related to using a time marker associated with a fault event, and thus does not cure the deficiencies in Hogan, Zadeh and Sawyer, in that Rowles does not teach or suggest continuously updating information associated with the location of the mobile terminal.

CONCLUSION

Accordingly, in view of the above remarks, reconsideration of the rejections of each of claims 2, 4-6, 8 and 10-14 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Matthew J. Lattig at (703) 668-8026 (direct).

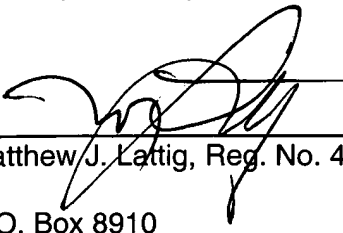
If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any

additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly,
extension of time fees.

Respectfully submitted,

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